



AUTOMATION SYSTEMS
GROUP

Vision™ LPM

Load Port Module

TOOL AUTOMATION

Designed for manufacturability and reliability, Brooks Automation's seventh-generation load port module provides the ultra-clean functionality and superior load port-to-FOUP interoperability required for advanced semiconductor manufacturing.

Features

- Local LCD Interface with software-selectable fab-specific configurations
- Compliance with SEMI, CE, and fab requirements
- End-of-line configurable options
- Compatibility with industry-leading FIXLOAD™ 6M
- Kinematic mounting system

Benefits

- Fast, accurate wafer access
- Highest levels of cleanliness
- Reduced setup, production cycle time, and lead times
- Superior operational efficiency and serviceability
- High reliability
- Maximum tool uptime

Seventh-Generation Product from the Inventor of Load Ports

The largest semiconductor automation supplier in the world, Brooks Automation established the industry standards for LPM technology with its highly regarded and widely installed FIXLOAD™ product line. Brooks' Vision LPM leverages the technological innovation and domain expertise gained through multiple LPM generations to meet the stringent automation requirements of today's world-class semiconductor manufacturers.

Product Description

The Vision LPM combines leading-edge hardware and software features to deliver optimal interoperability and interchangeability. Vision receives a Front Opening Unified Pod (FOUP) or automated Front Opening Shipping Box (FOSB), docks it to the equipment, and removes the door, making wafers accessible for transfer without risk of particle contamination. It is compatible with all SEMI-compliant FOUPs and auto FOSBs delivered manually or via Automated Material Handling System (AMHS) vehicles and exceeds even the most rigorous reliability specifications with an MCBF of greater than 500,000.

The Vision LPM is highly flexible, allowing users to configure fab settings via software in a matter of seconds. End-of-line configurable options—including carrier ID, mapping, and E84, as well as indicators and buttons—drastically reduce cycle time. Brooks Automation's kinematic mounting system enables users to replace a taught Vision LPM without having to manually re-teach the system, resulting in faster, easier set-up. Pre-configured packages—available to meet global fab requirements—minimize product installation and lead times. Plus, Vision's flexible Local LCD Interface, with color touch-screen LCD, enables fab-specific configuration with the touch of a button. In addition, the patented Vision LPM is fully SEMI compliant, CE certified, and meets all SEMATECH I300I load port guidelines.



Vision LPM

Product Specifications

Configuration	Compatibility	BOLTS, FIXLOAD™ 6M
	Carrier Types	SEMI Compliant FOUP, auto FOSB, SWIF/FFO
	Status Indicators	Software configurable touch screen color LCD
	Operator Push Buttons	Software configurable multi-color LED's
	Carrier Sensors	Placed and Present, Info pad A ,B, C, D
	Mapping	Thru beam on z-axis
Physical Properties	Weight	90 lbs (40 kg)
	Clamping Mechanism	Active, using primary FOUP retaining feature
	Actuation	Servo and stepper controlled
	Width	471 mm (18.54")
	Depth	492 mm (19.37") (from BOLTS-M plane), 571 mm (22.48")
	Height	1,412 mm (55.59")
	Loading Height	900 mm ±10 mm (35.43" ± 0.39")
Facilities	Control Interface	Serial, Ethernet
	Input Voltage/Current	90-240VAC @ 4 amps (fused) Standalone, 48VDC @ 4 amps (fused) Jet version
	Vacuum Requirement	> 510mm Hg (20 in.) at 50 cc/sec
	Vacuum Connections	6mm
	Operating Temperature	10°C to 40°C
	Storage Temperature	5°C to 50°C
Environment	Exposed Materials and Coating	Baked powder coat polyurethane, plastics
	Cleanliness	ISO Class 1 compatible
Performance	Reliability (per SEMI E10)	500K MCBF
	Speed	10 sec. open/close 16 sec. open with mapping
	Compliance	All applicable SEMI, FOUP interchangeability, CE, and fab requirements

*For more information, please contact your local Brooks Automation sales representative
or visit www.brooks.com.*

